ABSTRACT

METHOD FOR HANDLING DATA TRANSMISSIONS WITHIN A MODEM

A method for handling data transmissions within a modem is disclosed. A codeword is generated by compressing one or more incoming characters. The incoming characters and codeword are subsequently stored in a buffer. Then, a cost difference between transmitting all the codewords previously stored in the buffer and transmitting all the characters previously stored in the buffer is updated based on the most recent codeword. If the determined cost difference is less than a low limit value, the characters previously stored in the buffer are transmitted. However, if the determined cost difference is greater than a high limit value, the codewords previously stored in the buffer are transmitted. Otherwise, if the determined cost difference falls inclusively between the low limit value and the high limit value, transmission of the buffered data is deferred until the cost difference is recalculated on the next codeword.